



# Information centre

## VZ 300 expansion

I would like to respond to your reply to W.E.P. ("VZ-300 Expansion Problem", Information Centre, January 1988). I think you may be on the wrong track in your advice.

The "garbage on the display" is a familiar symptom to anyone who has tried to build "add-ons" to system-80s, TRS-80 Model Is etc. I believe the VZ series has similar ROMS.

The problem is that the screen is initially cleared by the startup routine software: there is no hardware clear-screen, and until the startup routine has run, the random contents of video RAM are displayed. Hence the "garbage on the screen".

I have not seen the original circuit, so I don't know exactly what has happened. Things to check are:

(1) Are the ROMS still properly seated in their sockets?

(2) Is there a possibility that there is an address conflict between the new RAM and either the video RAM or the ROM. Perhaps try starting the computer with all RAM removed?

(3) An easy thing to do is to short an address or data line to ground or 5V, or to one of the other bus lines.

In all these cases (and in all cases I have seen) there is usually no "damage" done, no blown chips or anything. You just have to find out why the CPU is not communicating correctly with the ROM & video RAM, remove the faulty connection, and everything works again. (R.L., Downer, ACT)

• **Thanks for the helpful advice, R.L.**

## Low Distortion Oscillator

Referring to comments by N.V. of Kirawee NSW and DE Graham of WA in September and November 1987 issues, I had the same trouble. It was obviously caused by the dual pot so I changed it for one of different manufacture but without success.

I purchased three different ones, they were all the same. The mechanical span was OK but excessive resistance is lost by the connections, easily checked with multimeter.

After considerable scouting round I had a wire wound one assembled. I paid \$60 + tax for same, knowing it had a

mechanical span of 270° (electrically less) not 293° electrically as needed and was too long. But hoped I could rework it to do the job, and I eventually achieved this (I do not recommend this challenge).

The calibration of my instrument finished up approximately. 9.8 at 10, 16 at 15, 22 at 20, 29 at 25, 58 at 50, and 100 OK. Reasonable, but not lab standard.

Note: if Q2 (BC547) is noisy, it will cause nasty spikes on the waveforms.

As these kits are still on the market I consider that some action should be taken to correct this oversight as I believe we three are not the only victims. (T.C.W., West Brunswick, Vic).

• **Thanks for the information, T.C.W. It does look as if some of the problems are due to the pots supplied with some kits.**

## Replacement transformer

I have a problem concerning where to buy a replacement transformer for an old amplifier. The amplifier is in perfect condition and works very well except for its blown transformer.

The amplifier is a PHODIS CE-6000 and the transformer has "T-16" marked

on it. I was wondering if you, or any of your readers would be able to help me out by suggesting where I would be able to buy a replacement, or how to substitute something else. Failing this, I would like to buy another of these amplifiers, or just the transformer, from one of your readers, and would be thankful if you could publish my name, address and number.

The transformer's input is 240V AC and its outputs are as follows:

(Left Side)	(Right Side)
117 V	32.0 V
100 V	0 V
0 V	32.0 V
117 V	6.3 V
100 V	0 V
0 V	

I would also like to buy or borrow a manual for this amplifier, or to photocopy parts of it. (Trevor Harrison, 37 Patterson Road, Lalor Park 2147. Phone (02) 622 5725)

• **We can't advise where to locate a replacement, Trevor, but perhaps a reader may be able to help.**

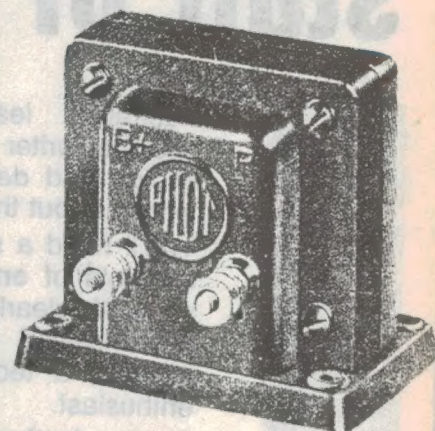
## What was it?

This month's mystery item was a component used in many of the older radio sets and amplifiers using valves. The unit pictured was contained in a sturdy bakelite case, and had a pair of screw terminals on each side. It cost 15 shillings in 1927.

Later valve sets generally didn't use these components, but they returned in a modified form with the first transistor radios and amplifiers.

## Answer for July

July's mystery item was a Jewell model 115 Tube Checker, one of the first valve testers marketed in Australia. It had a single 4-pin socket for the valves to be tested, as most of the



valves used in 1928 were of the "UV" 4-pin type. Other types could be tested using an adaptor. Later valve testers grew quite large, with a great many sockets to cope with a wide variety of base configurations and pin connections.